

REMARKS

Claims 1-19 are pending in the present application. Claims 1-14 and 19 stand rejected under 35 USC §112. Claims 1, 2, 4-6, 8-11, 13, 15-17, and 19 stand rejected under 35 USC §102 as being anticipated by U.S. Patent No. 6,559,775, to King. Claims 3, 7, 12, 14, and 18 stand rejected under 35 USC §103 as being unpatentable over King in view of U.S. Patent No. 6,147,597, to Facory. Claim 19 is hereby cancelled.

Claims 1, 4, and 8 have been amended in response to the rejections under 35 USC §112, while claim 19 has been cancelled. Applicant thanks the Examiner for the careful reading of these claims. As claims 2, 3, 5-7, and 9-14 are rejected as being dependent from claims 1, 4, and 8, it is believed that all rejections under 35 USC §112 have been overcome, and withdrawal of this rejection is respectfully requested.

It is respectfully submitted that King does not anticipate the claims of the present application, as amended. The present application is directed towards activating a movable barrier based upon an actuation of a component of a vehicle. As noted in the Background of the Invention, previous barrier operator systems have utilized actuation of a component of the vehicle, or occurrence of events within the vehicle, to operate the barrier operator. However, these previous systems require hardwiring or into the vehicular components relied upon for the actuation of the movable barrier operator, or some other “invasive method,” typically limited to electrical triggering events (see page 2, lines labeled 5-7). The present application, by way of example, includes the transmitter unit 200 that “non-invasively detects the occurrence of an event 206.” Page 5, lines labeled 23-34. Accordingly for the transmitter unit 200, “no need exists to interfere with, tap, or modify the internal wiring in the vehicle.” Page 5, line labeled 31 - page

6, line labeled 5.

The specification provides many examples of a non-invasive sensing. For instance, the transmitter unit 200 “may include a sensor that detects energy produced as a result of the occurrence of an event.” Page 5, lines labeled 30-31. This may be the electromagnetic energy produced by a light being turned on (see page 11, line labeled 14), the sonic signal produced by an opened window (see page 11, line labeled 15), or visible electromagnetic radiation (see page 8, lines labeled 16-17). Examples of events creating detectable energy include actuation of a brake, motion of a window, activation of a lock, movement of a mirror, movement of a radio control, movement of a moon or sun roof, actuation of a heater, setting of a cruise control, and movement of a windshield wiper blade. See page 4, lines labeled 30-35. To further elaborate, it is noted that the *movement* itself (i.e., the movement of a mirror) that is detectable. More specifically, a transmitter unit 200 “may be placed on the dashboard of the vehicle 202 to detect the actuation of the windshield wiper blades or the movement of the window of the vehicle.” Page 7, lines labeled 9-11.

The cited King patent merely describes the acknowledged prior art, that is, the “invasive” connection with the components. King discloses a transmitter system which is first armed by recognizing a proximity to a receiver for the garage door opening mechanism. It is taught that a navigation or global positioning system (GPS), or items positioned proximally to the receiver such as magnets located at the end of driveway, may be utilized to initially arm the transmitter.

Once armed and before activation of a transmitter 27, a processor 30 “monitors the [collision avoidance] sensors 42, 44, 46.” Col. 3, lines 42-43. The processor system of King determines whether a signal should be sent to the receiver. The processor 30 “causes the transmitter 27 to generate the garage door opener signal based upon input from the vehicle’s

collision avoidance system 40.” Col. 2, lines 13-16. The processor 30 also receives “an input from the vehicle engine 51” indicating whether the engine is running. Col. 3, lines 11-14.

The transmitter system, including the processor, generates a signal based upon “information from the collision avoidance sensor.” Abstract. The sensors 42, 44, 46 recognize the presence, distance, and/or motion of an object. Col. 2, lines 32-35. To open the garage door, the forward sensor 46 determines when the vehicle is close to an object. The processor 30 then “determines that the object is the garage door 68 and causes the transmitter 27 to generate” an open signal. Col. 3, lines 44-48. This determination is made based on the vehicle being within a “predetermined distance” to the garage. Abstract. To close the garage door, the processor 30 continues to monitor the area surrounding the vehicle, via the sensors 42, 44, 46, measure a predetermined period of time, and direct the transmitter 27 to generate a close signal to the receiver for closing the door.

As can be seen in Fig. 1, the system of King is an invasive system. The processor 30 and transmitter 27 are shown schematically wired with each other. As can also be seen, the processor 30 is directly wired to each of the rear, forward, and side collision avoidance sensors 42, 44, and 46. Additionally, the processor is directly wired to the engine 51. In fact, “the system shares sensors from the vehicle’s collision avoidance system, thereby reducing cost.” Col. 4, lines 16-18.

In the present application, independent claim 1 is “a method of actuating a remote control access system in a motor vehicle” including “non-invasively detecting an actuation of at least one component of the motor vehicle.” As the King system clearly describes only an “invasive system,” where the processor and transmitter are wired directly into the collision avoidance sensors and to the engine, it cannot anticipate a “non-invasive” system.

Claim 1 further requires “transmitting a control signal to the remote control access system

in response to detecting the actuation.” The processor of King “monitors” the collision avoidance sensors, and processes the information received from those sensors to determine when the garage door is within a predetermined distance. The King processor, therefore, does not detect “an actuation of” a component, and does not transmit a control signal in response to the detection. Instead, the processor continually receives information from the sensors, makes assessments based upon the information, and, when certain criteria are met, directs the transmit to provide an appropriate signal. As the King transmitter system sends a signal based on information meeting certain criteria, information that is continually supplied by an actuated collision avoidance sensor, the transmitter does not detect “an actuation,” and does not transmit a signal in response to the detection of the actuation. Again, as King fails to satisfy these limitations, it cannot anticipate claim 1.

Claim 2 is also rejected under 35 USC §102 as being anticipated by King. As claim 2 is dependent from claim 1, it cannot be anticipated by King for at least the above-discussed reasons.

Independent claim 4 is a method for actuating a remote control access system including “receiving an indication of an actuation of at least one component of the motor vehicle,” and “upon . . . receipt of the indication of the actuation, transmitting a control signal from the transmitter unit to the remote control access system.” As discussed above, King does not receive an indication of an actuation and does not transmit a control signal upon receipt of an indication. Instead, King monitors an activated collision avoidance sensor, processes and assesses the information received from the sensor, and transmits a control signal when the information received from the sensor meets specified criteria. For at least this reason, claim 4 cannot be anticipated by King.

Claims 5 and 6, rejected as anticipated by King, are dependent from and include all the limitations of claim 4. Accordingly, these claims also cannot be anticipated by King.

Claim 8 is a device for use in a motor vehicle actuating a remote control access system including a “detection circuit for non-invasively sensing an indication, the indication generated by the actuation of a component of the motor vehicle,” and a “transmitter . . . for transmitting a control signal to the remote control access system upon receiving the indication.” As discussed above, King does not described, disclose, or suggest a system “non-invasively” sensing an indication. Claim 8 requires that the actuation of the component generates an indication, and the transmitter provides the control signal “upon receiving the indication.” In contrast, the King system utilizes an indication of the activation of the collision avoidance sensors to begin processing and assessing a stream of information from the sensors, and subsequently providing a signal when the processed information meets certain criteria. In other words, the King system does not send a signal “upon receiving the indication,” as required by claim 8. As these limitations are not taught or suggested by the King patent, the claim cannot be anticipated by this reference.

Claims 9-11 and 13 are dependent from claim 8 and, therefore, include all the described limitations of claim 8. As claim 8 is not anticipated by the King patent, claims 9-11 and 13 also cannot be anticipated by the same.

Claim 15 is an independent claim for a device for actuating a remote control access system including “a detection circuit for sensing the actuation of at least one component of a motor vehicle,” a “proximity detection circuit for detecting whether the motor vehicle is in proximity to the remote access system,” and a transmitter circuit that “sends a control signal upon the sensed actuation and the indication that the motor vehicle is in proximity to the remote control access system.” As discussed above, the King reference does not teach sensing the actuation of a component, wherein a transmitter sends a control signal “upon the sensed actuation.” Instead, the King system analyzes an information stream from the component, and

sends a signal when the analyzed information meets specified criteria. For at least these reasons, the King patent does not anticipate claim 15. As claims 16 and 17 are dependent from claim 15, they also are not anticipated by the King patent.

Claim 19 is cancelled.

It is further submitted that the King patent, in view of the Facory patent, does not make obvious claims 3, 7, 12, 14, and 18. The Facory patent discloses activation of turn signals 61, 62, for instance, to activate an AND logic gate 30 which transmits this information to a switch 70 and a transmitter 50 for opening a garage door. Each of these components is hardwired into an electrical system of a motorcycle, as shown in Fig. 1. Accordingly, the system of Facory is "invasive."

Claim 3 is dependent from and incorporates all the limitations of claim 1. As noted above, claim 1 requires "non-invasively detecting an actuation of at least one component of the motor vehicle." As both King and Facory teach invasive systems, the combination of these references fails to suggest or otherwise make obvious the limitations of "non-invasively detecting an actuation." Accordingly, the claim cannot be found obvious by these cited references.

Claim 7 is dependent from claim 4, discussed above. Claim 7 requires the detecting of the indication to include "detecting the occurrence of at least one of electromagnetic energy from the actuation of an automotive light, the actuation of a brake, the motion of a window, the activation of a lock, the movement of a mirror, the movement of a radio control, the movement of a roof opening; the movement of a windshield wiper blade; the actuation of a heater; or the setting of a cruise control." It is noted that the system of Facory requires hardwiring the transmitter to an AND logic gate with two switches, such as the turn signal switches. Accordingly, the system of Facory relies upon electrical connections for triggering, as does the

King system. As has been noted, one of the deficiencies of prior art systems is exactly that these systems are limited to electrical triggering events. Nonetheless, Facory discloses the switching of two turn signals (automotive lights) in combination to prompt a signal from the AND logic gate for directing the transmitter to activate a garage door.

In the present claim 7, the actuation of the automotive light produces electromagnetic energy, the occurrence of which is detected. The specification refers to “electromagnetic energy” (page 7, line labeled 29), “electromagnetic radiation” (page 8, line labeled 17), “electromagnetic signal” (page 11, line labeled 32), and “visible electromagnetic radiation” (page 9, lines labeled 16-17). The following definitions are provided by The Authoritative Dictionary of IEEE Standards Terms, Seventh Edition, 2000, published by the Institute of Electronics and Electrical Engineering, Inc.:

Electromagnetic signal: the intelligence, message, or effect to be conveyed over a communication system or broadcasting system via electromagnetic waves.

Electromagnetic radiation (2): the emission of electromagnetic energy from a finite region in the form of unguided waves.

Electromagnetic waves (1): waves characterized by variations of electric and magnetic fields. *Note:* Electromagnetic waves are known as radio waves, hat rays, light rays, etc., depending on the frequency.

Clearly, under these definitions, the term “electromagnetic energy” does not include hardwired electrical connections. As Facory and King fail, either singly or in combination, to teach, disclose, or otherwise suggest anything other than a hardwired electrical connection, they cannot make this limitation obvious. As the claim is styled as a Markush group, it is noted that none of the other group members are disclosed or suggested by the cited art. Accordingly, claim 7 including this limitation cannot be obvious.

Claim 12 is dependent from claims 10 and 8, thereby incorporating the limitations of each. Claim 8 includes "a detection circuit for non-invasively sensing an indication." As has been discussed herein, neither King nor Facory disclose or suggest a non-invasive system, and their combination does not serve to suggest or make obvious this limitation. Accordingly, this claim 12 is patentable over the cited art.

Claim 14 is dependent from claim 8. Accordingly, this claim is patentable over the combination of King and Facory for at least the reasons discussed for claim 12, above.

Claim 18, as amended herein, requires a detection circuit that "senses one of electromagnetic energy from the actuation of an automotive light; the actuation of a brake; the motion of a window; the activation of a lock; the movement of a mirror; the movement of a radio control; the movement of a roof opening; the movement of a windshield wiper blade; the actuation of a heater; or the setting of a cruise control." As discussed above for claim 7, the cited references do not teach utilization of electromagnetic energy from the actuation of an automotive light, instead being hardwired, and do not teach or suggest the other members of the group. Accordingly, the references cannot make obvious claim 18.

In light of the previous discussion, withdrawal of each of the rejections is respectfully requested.

Conclusion

In view of the foregoing, Applicant submits that the application and drawings are in condition for allowance. Applicant further submits that the amendments made herein are fully supported by the originally filed specification.

The Commissioner is hereby authorized to charge any additional fees which may be

required with respect to this communication or credit any overpayment to Deposit Account No.
06-1135.

Respectfully submitted,

FITCH, EVEN, TABIN & FLANNERY

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A handwritten signature in black ink, appearing to read 'B. S. Clise', is written over a horizontal line.

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